

~~IN THE CLAIMS:~~

~~The claims have been amended as follows:~~

~~1-11. (Cancelled)~~

12. (Previously amended) Synchronizing device for a shift transmission, comprising at least one outer and one inner synchro ring and at least one intermediate ring, the synchro rings and the intermediate ring in each case having conical surfaces, via which they are connected at least indirectly to one another, and at least one of the synchro rings and the intermediate ring including a metallic basic material, wherein at least one of the synchro rings and the intermediate ring include the metallic basic material which is nitride-hardened in such a way that, by process parameters being set during nitride-hardening, one of a non-metallic γ' -connecting layer and a non-metallic ϵ -connecting layer is formed on a conical surface of at least one of the synchro rings and the intermediate ring.

13. (Currently amended) Synchronizing device according to Claim 12, wherein ~~a~~ the γ' -connecting layer is formed which includes Fe_4N .

14. (Currently amended) Synchronizing device according to Claim 12, wherein ~~a~~ the ϵ -connecting layer is formed which includes Fe_2N or Fe_3N .

15. (Previously added) Synchronizing device according to Claim 12, wherein at least one of the synchro rings and the intermediate ring is plasma-nitride-hardened.

16. (Previously added) Synchronizing device according to Claim 12, wherein the metallic basic material of at least one of the synchro rings and the intermediate ring is a sintered material.

17. (Previously added) Synchronizing device according to Claim 12, wherein the metallic basic material of at least one of the synchro rings and the intermediate ring is a sinter-forged material.

18. (Previously added) Synchronizing device according to Claim 12, wherein the metallic basic material of at least one of the synchro rings and the intermediate ring is a hardenable steel.

19. (Previously amended) Synchronizing device according to Claim 12, wherein nitriding depth is 200 to 800 μm .

20. (Previously amended) Synchronizing device according to Claim 12, wherein the γ' -connecting layer and the ϵ -connecting layer is 1 to 20 μm thick.

21. (Previously added) Synchronizing device according to Claim 12, wherein the intermediate ring is arranged between the inner synchro ring and the outer synchro ring, the conical surfaces of the intermediate ring having a friction layer, and the γ' - or ϵ connecting layer being in each case located on the conical surfaces of the two synchro rings in the outer region.

22. (Previously added) Synchronizing device according to Claim 12, wherein the inner synchro ring or the outer synchro ring is firmly connected to a gearwheel, the γ' - or ϵ -connecting layer being applied to one synchro ring, and the friction layer being applied to the other synchro ring.

23. (Currently amended) Synchronizing device according to Claim 13, wherein ~~a~~ the ϵ -connecting layer is formed which includes Fe_2N or Fe_3N .

24. (Previously added) Synchronizing device according to Claim 13, wherein at least one of the synchro rings and the intermediate ring is plasma-nitride-hardened.

25. (Previously added) Synchronizing device according to Claim 14, wherein at least one of the synchro rings and the intermediate ring is plasma-nitride-hardened.

26. (Previously added) Synchronizing device according to Claim 13, wherein the metallic basic material of at least one of the synchro rings and the intermediate ring is a sintered material.

27. (Previously added) Synchronizing device according to Claim 14, wherein the metallic basic material of at least one of the synchro rings and the intermediate ring is a sintered material.

28. (Previously added) Synchronizing device according to Claim 13, wherein the metallic basic material of at least one of the synchro rings and the intermediate ring is a sinter-forged material.

29. (Previously added) Synchronizing device according to Claim 14, wherein the metallic basic material of at least one of the synchro rings and the intermediate ring is a sinter-forged material.

30. (Previously added) Synchronizing device according to Claim 13, wherein the metallic basic material of at least one of the synchro rings and the intermediate ring is a hardenable steel.

31. (Previously added) Synchronizing device according to Claim 14, wherein the metallic basic material of at least one of the synchro rings and the intermediate ring is a hardenable steel.

32. (Previously amended) Synchronizing device according to Claim 13, wherein nitriding depth is 200 to 800 μm .

33. (Previously amended) Synchronizing device according to Claim 14, wherein nitriding depth is 200 to 800 μm .

34. (Currently amended) A synchronizing device assembly for a vehicle shift transmission, comprising:

a first synchro ring with a first friction surface, and

a second synchro ring with a second friction surface which in use selectively engages the first friction surface,

wherein said first synchro ring is formed of a metallic ~~base~~ basic material, and

wherein said first synchro ring is nitride hardened to form one of a non-metallic γ' -connecting layer and a non-metallic G-connecting layer on said first friction surface.

35. (Currently amended) A synchronizing device assembly according to Claim 34, wherein said first synchro ring is nitride hardened to form a the non-metallic γ' -connecting layers layer of Fe_4N on said first friction surface.

36. (Currently amended) A synchronizing device assembly according to Claim 34, wherein said first synchro ring is nitride hardened to form a the non-metallic ε -connecting layers layer of Fe_2N or Fe_3N on said first friction surface.

37. (Previously added) A synchronizing device assembly according to Claim 34, wherein said first synchro ring is plasma-nitride-hardened.

38. (Previously added) A synchronizing device assembly according to Claim 34, wherein said first synchro ring is formed of a sintered material.

39. (Previously added) A synchronizing device assembly according to Claim 34, wherein said first synchro ring is formed of a sinter-forged material.

40. (Previously added) A synchronizing device assembly according to Claim 34, wherein said first synchro ring is formed of a hardenable steel.

41. (Previously amended) A synchronizing device assembly according to Claim 34, wherein nitriding depth on the first synchronizing is between 200 and 800 μm .

42. (Previously added) A synchronizing device assembly according to Claim 34, wherein the connecting layer is between 1 to 20 μm thick.

43. (Previously added) A synchronizing device assembly according to Claim 34, wherein the connecting layer is 10 μm thick.

44. (Currently amended) A method of making synchronizing device assembly for a vehicle shift transmission, comprising:

a first synchro ring with a first friction surface, and

a second synchro ring with a second friction surface which in use selectively engages the first friction surface,

said method comprising forming said first synchro ring of a metallic base basic material, and

nitride hardening said first synchro ring to form one of a non-metallic γ' -connecting layer and a non-metallic G-connecting layer on said first friction surface.

45. (Currently amended) A method according to Claim 44, further comprising nitride hardening said first synchro ring to form a the non-metallic γ' -connecting ~~layers~~ layer of Fe_4N on said first friction surface.

46. (Currently amended) A method according to Claim 44, further comprising nitride hardening said first synchro ring to form a the non-metallic ϵ -connecting ~~layers~~ layer of Fe_2N or Fe_3N on said first friction surface.

47. (Previously amended) A method according to Claim 44, further comprising plasma-nitride-hardening said first synchro ring.

48. (Previously added) Synchronizing device according to Claim 20, wherein the γ' -connecting layer and the ϵ -connecting layer are approximately 10 μm thick.
